

REMARKS

I. Present Status of Patent Application

Claim 34 has been rejected under 35 U.S.C. § 112 ¶ 2 as allegedly failing to particularly point out and distinctly claim the subject matter of the invention.

Claims 1-7, 27-33, and 35 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Stanhope *et al.* (U.S. Patent Number 5,527,579, hereinafter "Stanhope") in view of Cates *et al.* (U.S. Patent Number 4,981,488; hereinafter "Cates") and Johnson *et al.* (U.S. Patent Number 4,902,300; hereinafter "Johnson").

Claims 1, 5-9, and 35 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Stanhope in view of Johnson and Riggins *et al.* (U.S. Patent Number 4,898,596; hereinafter "Riggins").

II. Discussion of Rejections

A. *Rejection of Claim 34 Under 35 U.S.C. § 112 ¶ 2*

Claim 34 has been rejected under 35 U.S.C. § 112 ¶ 2 as allegedly failing to particularly point out and distinctly claim the subject matter of the invention. Applicant thanks the Examiner for such a careful review of the claims. In response thereto, Applicants have directly amended claim 34 to overcome the indicated deficiency.

Applicants wish to clarify that the foregoing amendment has been made for purposes of better defining the invention in response to the rejections made under 35 U.S.C. § 112, and not in response to the rejections made based on prior art. Indeed, Applicants submit that no substantive limitations have been added to the claims. Therefore, no prosecution history estoppel arises from

the foregoing amendment. Black & Decker, Inc. v. Hoover Service Center, 886 F.2d 1285, 1294 n. 13 (Fed. Cir. 1989); Andrew Corp. v. Gabriel Electronics, Inc., 847 F.2d 819 (Fed. Cir. 1988); Hi-Life Products Inc. v. American National Water-Mattress Corp., 842 F.2d 323, 325 (Fed. Cir. 1988); Mannesmann Demag Corp. v. Engineered Metal Products Co., Inc., 793 F.2d 1279, 1284-1285 (Fed. Cir. 1986); Moeller v. Ionetics, Inc., 794 F.2d 653 (Fed. Cir. 1986).

Applicants submit that claim 34 is presently in condition for allowance. Hence, Applicants respectfully request the allowance of claim 34.

B. Rejection of Claims 1-7, 27-33, and 35 Under 35 U.S.C. § 103(a) Over Stanhope in View of Cates and Johnson

The Office Action rejects claims 1-7, 27-33, and 35 under 35 U.S.C. § 103(a) as being unpatentable over Stanhope in view of Cates and Johnson. Applicants respectfully traverse this rejection.

1. Independent Claims 1 and 30.

The Office Action rejects independent claims 1 and 30 under 35 U.S.C. § 103(a) as being unpatentable over Stanhope in view of Cates and Johnson. In doing so, the Office Action states:

Stanhope describes flame resistant fabric made from a plurality of warp fibers of a heat resistant material and a plurality of filler fibers, (see abstract; column 2, lines 51-67). Stanhope describes the warp yarns can be made from KEVLAR, corresponding to the para isomer of poly(p-phenyleneterephthalamide) which corresponds to para-aramid, or polyamide fiber, (column 4, lines 47-55). . . . Stanhope is silent about color printing in a pattern and flame proofing for materials that are not inherently flame resistant.

. . .

Cates describes aramid fabrics which are printed in a camouflage pattern, (column 1, lines 35-38). Cates describes a process of

printing fabrics (column 2, lines 64-68 and column 3, lines 1-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fabric of Stanhope with the flame retardant materials coated/treated cellulose and phosphonates of Johnson and the printing pattern of Cates motivated with the expectation that the improved blend would be more flexible over conventional thermal resistant garments

(Emphasis added)

While the Office Action rejects claims 1 and 30 as a group, Applicants respectfully submit that the scope of claims 1 and 30 are not coterminous. Hence, Applicants respectfully submit that the Office Action improperly rejects claim 1 and 30 as a group. MPEP § 707.07. However, in an effort to expedite prosecution of the application, Applicants address the novel and nonobvious features of each of the rejected independent claims.

a. Independent Claim 1

Independent claim 1 recites:

1. A patterned flame resistant fabric, comprising:
a plurality of non-producer colored high tenacity, flame resistant fibers;
a plurality of cellulosic fibers containing a flame retardant compound; and
at least one color that is printed on the fabric to form said pattern.

(Emphasis added).

Applicants submit that claim 1 is neither anticipated nor obvious in view of the cited references.

It is well settled that, "[u]nder section 103, teachings of references can be combined only if there is some suggestion or incentive to do so." ACS Hospital Systems, Inc., v. Montefiore Hospital, 732 F.2d 1572, 1577; 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Since the Office Action

does not indicate any suggestion or teaching in the prior art for the alleged obviousness, Applicants respectfully submit that the Office Action fails to establish a prima facie case of obviousness.

Additionally, it is well-settled that a prior-art reference must be considered in its entirety, including portions that would lead away from the claimed invention. MPEP § 2141.02; W.L. Gore & Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540 (Fed. Cir. 1983). Applicants respectfully submit that the Final Office Action improperly considers only a portion of Cates' teachings in that the Final Office Action wholly ignores Cates' teaching on the impossibility of combining of Cates with Stanhope.

Specifically, Cates does not teach the printing of fabrics on blends because it is impossible to print a pattern on a blend using Cates' technique. In fact, Cates expressly teaches away from combining its teachings with Stanhope. For example, Cates explicitly provides that:

Blends of poly(m-phenyleneisophthalamide) fibers with other fibers, including fibers of the para isomer (Kevlar®, DuPont), *may not be subjected to the dying process in which case only the meta isomer fibers will be thoroughly dyed.*

Cates, at column 4, lines 12-16 (emphasis added).

Thus, Cates explicitly teaches that blends having para isomers cannot be fully dyed or printed using the techniques disclosed by Cates. Indeed, Cates explicitly teaches that:

not all types of aromatic polyamide fibers can be easily and reproducibly dyed and/or treated by this process; those fibers that are not affected by the dye diffusion promoter and do not allow the dye to enter the fiber are only surface stained and are not fully dyed.

Cates, at column 3, lines 51-56 (emphasis added).

Given this explicit teaching in Cates, it is difficult to see how the Office Action can maintain that Cates may be combined with Stanhope or Johnson.

As admitted by the Examiner, Stanhope "is silent about color printing in a pattern." The reason for Stanhope's silence is that the Stanhope disclosure is limited to fabric manufacture. Stanhope neither addresses dyeing nor patterned printing on the fabric.

Although Johnson's teachings are directed to a dyeing process, Johnson is also silent as to pattern printing. In this regard, Johnson is also wholly devoid of any teachings with reference to printing a pattern on a fabric.

Since the only cited reference that teaches printing a pattern (*i.e.*, Cates) explicitly teaches the impossibility of printing on blends having para isomers, Applicants submit that Cates cannot be combined with either Stanhope or Johnson to teach claim 1 of Applicants' invention. Specifically, claim 1, unlike the cited references, explicitly requires that a color be "printed on the fabric to form said pattern." Hence, unlike Cates, Applicants' claim 1 permits the printing on the fabric, which comprises both "a plurality of non-producer colored high tenacity, flame resistant fibers" and "a plurality of cellulosic fibers containing a flame retardant compound."

Applicants further note that Cates' teaching is no different than what Applicants have asserted in their patent application, *i.e.*, that blends including high tenacity fibers are not conventionally amenable to pattern printing. *See* Application at page 8, lines 10-18; *see, also*, Applicants' First Response at page 12. Therefore, Applicants' claimed fabrics reflect on unexpected results in the industry.

Applicants respectfully submit that the cited references neither teach nor suggest that a color be "printed on the fabric to form said pattern," as explicitly required by claim 1. In this regard, Applicants submit that claim 1 is neither anticipated nor obvious in view of Stanhope, Cates, or Johnson, either alone or in combination. Therefore, Applicants respectfully request

allowance of claim 1.

b. Independent Claim 30

Independent claim 30 recites:

30. (Once Amended) A camouflaged-patterned flame resistant fabric, comprising:
a plurality of non-producer colored para-aramid fibers;
a plurality of cellulosic fibers containing a flame retardant compound; and
a plurality of colors that are printed on the fabric to form a camouflage pattern.

(Emphasis added).

Applicants submit that the explicit teaching in Cates teaches away from printing a pattern on a fabric having both "non-producer colored high tenacity, flame resistant fibers" and "cellulosic fibers."

Since Cates, which is the only cited reference that teaches printing a pattern, explicitly teaches the impossibility of printing on blends having para isomers, Applicants respectfully submit that Cates cannot be combined with either Stanhope or Johnson to teach Applicants' claim 30. Applicants, therefore, respectfully request allowance of claim 30.

C. Rejection of Claims 1, 5-9, and 35 Under 35 U.S.C. § 103(a) Over Stanhope in View of Johnson and Riggins

The Office Action rejects claims under 35 U.S.C. § 103(a) as allegedly being obvious over Stanhope in view of Johnson and Riggins. In doing so, the Office Action merely addresses the dye-assistants, and not the pattern on the fabric. Applicants respectfully traverse this rejection.

1. Independent Claims 1 and 30.

The Office Action rejects independent claims 1 and 30, as a group, under 35 U.S.C. § 103(a) as being unpatentable over Stanhope in view of Johnson and Riggins. While Applicants submit that this grouping is improper, Applicants address the novel and nonobvious features of each of the rejected independent claims in an effort to expedite prosecution of the application.

a. Independent Claim 1

Independent claim 1 recites:

1. A patterned flame resistant fabric, comprising:
a plurality of non-producer colored high tenacity, flame resistant fibers;
a plurality of cellulosic fibers containing a flame retardant compound; and
at least one color that is printed on the fabric to form said pattern.

(Emphasis added).

Applicants submit that claim 1 is neither anticipated nor obvious in view of the cited references. For example, none of Stanhope, Johnson, and Riggins teaches "at least one color that is printed on the fabric to form said pattern." As identified above, Stanhope is wholly silent on processes used to impart color onto a fabric. Although Johnson and Riggins teach dyeing processes, neither teaches "print[ing] on the fabric to form said pattern."

In this regard, Applicants respectfully submit that Stanhope, Johnson, and Riggins, either alone or in combination, fail to teach "at least one color that is printed on the fabric to form said pattern" as recited in claim 1. Applicants, therefore, respectfully request the allowance of claim 1.

b. Independent Claim 30

Independent claim 30 recites:

30. (Once Amended) A camouflaged-patterned flame resistant fabric, comprising:
a plurality of non-producer colored para-aramid fibers;
a plurality of cellulosic fibers containing a flame retardant compound; and
a plurality of colors that are printed on the fabric to form a camouflage pattern.

(Emphasis added).

Applicants respectfully submit that none of Stanhope, Johnson, and Riggins teaches "a plurality of colors that are printed on the fabric to form a camouflage pattern." Since these references, either alone or in combination, fail to teach at least one of the recited elements of claim 30, Applicants submit that claim 30 is allowable. Applicants, therefore, respectfully request the allowance of claim 30.

D. Dependent Claims 2-9, 27-29, and 31-35

Claims 2-9 and 27-29 depend from allowable independent claim 1; and claims 31-35 depend from allowable independent claim 30. Applicants respectfully submit that, insofar as claims 2-9, 27-29, and 31-35 depend from allowable independent claims, for at least this reason, these dependent claims are allowable. Applicants, therefore, respectfully request allowance of claims 2-9, 27-29, and 31-35.

III. Prior Art Made of Record


The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

CONCLUSION

Applicants respectfully submit that all claims are in proper condition for allowance, and respectfully request that the Examiner pass this case to issuance. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

No fee is believed to be due in connection with this response. If, however, any fee is deemed to be payable, you are hereby authorized to charge any such fee to Deposit Account No. 20-0778.

Respectfully submitted,



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